

REMARKS

This responds to the Office Action dated on December 10, 2007.

Claims 1, 12, and 18-20 are amended. Claims 1-20 are now pending in this application.

§103 Rejection of the Claims

Claims 1-5 and 12-17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ishikawa (U.S. Patent No. 6,254,548). Claims 6-11 and 18-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ishikawa in view of Weijand (U.S. Patent No. 5,336,244). The rejections are traversed and reconsideration is respectfully requested.

Claim 1 has been amended herein to recite that the claimed implantable medical device contains within the device housing a temperature sensor, sensing circuitry for sensing cardiac activity, pulse generation circuitry for delivering pacing pulses, a controller programmed to process and store temperature data derived from the temperature sensor, and wherein the controller is further programmed to monitor temperatures before implantation of the device. The Ishikawa references appears to merely disclose an internal temperature transponder having a temperature sensor contained within a housing. Nothing in Ishikawa relates to an implantable device having cardiac sensing and pacing circuitry that includes a temperature sensor contained within the device housing. The Weijand reference discloses an implantable cardiac device that includes a temperature sensor incorporated into a pacing lead and thus teaches away from the recitation that the temperature sensor is contained within the device housing. Also, claim 1 recites that the controller is further programmed to monitor temperatures before implantation of the device, which limitation was formerly recited by claim 12. In rejecting claim 12, the Final Office Action states that “one of ordinary skill in the art would have found it obvious to monitor temperatures before implantation of the device because one would find monitoring the temperatures before implantation to be an effective way to test the device to ensure it is functioning properly before implanting, to avoid having to remove the device after implantation.” Applicant does not believe that such conclusory reasoning based upon the teachings of the present specification can properly be used as the basis of a section 103 rejection.

Applicant can find nothing in the prior art of record that indicates an awareness of the problem addressed by the claimed invention (i.e., that temperature changes to which the device is subjected before implantation can adversely affect subsequent operation after implantation) or that in any way suggests the solution of providing a temperature sensor within the housing that performs double duty by monitoring device temperature before implantation and monitors the patient's body temperature after implantation. Applicant therefore believes that nothing in the prior art of record would render obvious the devices recited by claim 1 and the claims depending therefrom.

The recitations of dependent claims 2-20 are asserted to be neither taught nor suggested by the prior art of record in the context of their combination with the recitations of claim 1. In particular, claims 2-3 relate to a temperature sensor that utilizes a proportional-to-absolute-temperature (PTAT) current source to generate a temperature signal. Although, as noted in the Final Office Action, the Ishikawa reference does describe a temperature-compensated current source, Applicant can not find any discussion in the reference that relates to the use of such circuitry as a temperature sensor for measuring body or device temperatures that are then stored for later retrieval. Claims 6-11 relate to the problems involved with measuring body temperature using a temperature sensor located within the device housing when the device also delivers shock therapy and periodically reforms an electrolytic capacitor used to deliver shock therapy. None of prior art references of record indicate an awareness of these problems or describe any situation in which such problems would even arise. Claims 12-17 recite particular features relating to pre-implantation monitoring of device temperature which, as aforesaid, is neither taught nor suggested by the prior art of record. Claim 18 has been amended to recite that the device controller is further configured to calibrate the temperature sensor by adjusting sensor measurements by an amount equal to the difference between an average temperature measurement and a nominal temperature assumed to be maintained by the patient's body, which limitation is asserted to be novel and non-obvious over the prior art of record. Regarding claims 19-20, Applicant finds nothing in Weijand or Ishikawa that relates to the limitations recited by those claims, and the Final Office Action does not assert otherwise.

For the reasons stated above, Applicant believes that claims 1-20 as amended herein are patentable over the prior art of record. Withdrawal of the rejections is respectfully requested.

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.116 – EXPEDITED PROCEDURE

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Title: IMPLANTABLE MEDICAL DEVICE WITH TEMPERATURE MEASURING AND STORING CAPABILITY

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (847) 432-7302 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Mail Stop AF, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 11 day of February 2008.

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Signature

